Message

From: Wayne Miller [Miller.Wayne@azdeq.gov]

Sent: 2/3/2016 9:12:57 PM

To: d'Almeida, Carolyn K. [dAlmeida.Carolyn@epa.gov]

CC: steve [steve@uxopro.com]

Subject: 2016-2-3 - wafb - thanks - ADEQ EPA SEE continuation reguests - ST012

Thank you. I am in training wed, and thurs. I will request UXO Pro, Inc. send me thoughts over the next couple days.

From: d'Almeida, Carolyn K. [mailto:dAlmeida.Carolyn@epa.gov]

Sent: Wednesday, February 03, 2016 12:40 PM **To:** Wayne Miller < Miller. Wayne@azdeq.gov>

Cc: Davis, Eva <Davis.Eva@epa.gov>

Subject: 2016-2-3 - wafb - ADEQ EPA SEE continuation requests - ST012 - cda epa

Wayne

Getting around now to responding to you on this. We sent our comments out on the EBR workplan last week which addresses the timing of transition to EBR in detail, though Amec could interpret the shutdown of steam as independent of that. I've looked at the January 20 responses Amec sent to our comments submitted in November. These are the remaining comments that I have:

- 1. Amec is now calling the criterion for remaining benzene concentrations to be below 500 ppb to be a "secondary criteria" for shutdown evaluation. When the transition criteria were presented in the May 2014 Final RD/RAWP there was no specific weight given to any of the criteria; they were equally weighted as originally presented. When I brought this up on the call I felt like Don's response was an attempt to bamboozle us. We can't accept the weakening of cleanup criteria for steam.
- 2. Another theme I see in the comment responses is that they are drawing a distinction between LNAPL within the treatment zone and outside of the treatment zone and that the bulk of LNAPL currently being recovered is coming from outside the treatment zone. It should not make any difference at all where the LNAPL is coming from as the ROD does not distinguish. They have not demonstrated to us that the sulfate can degrade LNAPL to meet RAOs by 2032. If they have to continue to inject steam until all the NAPL outside the TTZ is removed, so be it, they made that choice not to expand the steam system in the beginning despite our warnings.
- 3. They suggest that this thermal project is somehow "different" from other thermal projects due to the EBR component. However, don't most thermal projects have an subsequent EBR polishing step? Its not unique at all.
- 4. EBR has not been demonstrated to be appropriate to treat NAPL, only dissolved phase. The ROD does not state that EBR will be employed to treat NAPL.

Some of these themes are addressed in our EBR RDRAWP comments, but not all, and perhaps a followup letter is appropriate; I'm ok with issuing it as a joint letter if you want. Do you have anything you want to add from the 1/20/16 RTCs?

Carolyn d'Almeida Remedial Project Manager Federal Facilites Branch (SFD 8-1) US EPA Region 9 (415) 972-3150

"Because a waste is a terrible thing to mind..."

From: Wayne Miller [mailto:Miller.Wayne@azdeq.gov]

Sent: Thursday, January 21, 2016 12:04 PM

To: d'Almeida, Carolyn K. <dAlmeida.Carolyn@epa.gov>; Davis, Eva <Davis.Eva@epa.gov>

Cc: steve <steve@uxopro.com>; Bo Stewart <Bo@praxis-enviro.com>

Subject: 2016-1-21 - wafb - ADEQ will piggyback on EPA SEE continuation requests - ST012 SEE

Thank you for the work you and Eva are doing on the SEE shut down rebuttal. To quickly respond to AMEC/Terra-Therm plans for SEE ending Feb 2016, I do not see ADEQ developing an individual SEE-continuation request letter. My conceptual plan is to have ADEQ lend support (and maybe a few interjections) to any EPA correspondence. In consideration that a timely response is of the essence, one EPA-authored letter is probably best for the regulatory agency voice. I have assumed that Terra-Therm/AMEC are likely to begin scheduling boiler de-mob by the end of next week in order to have the cranes and trucks ready to roll right after the final de-pressurization in Feb. I believe that EPA is much further along this week with an Agency opinion letter that may persuade AMEC to retain the SEE injection longer.

I believe Bo Stewart (Praxis) and Steve Willis (UXO Pro) will send me SEE continuation opinions by early next week. I will forward to your attention for EPA evaluation for inclusion into an EPA letter.

Please let me know if this is not workable.

Wayne Miller Arizona Department of Environmental Quality, Waste Programs Division, Remedial Projects Section, Federal Projects Unit

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